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ABSTRACT

The National Education Association (NEA) in conjunction with the National Aeronautics and Space Administration, the National Library of Medicine, The Alaska Broadcasting Commission, and the Pacific PEACESAT Network, conducted four satellite experiments designed to improve professional communication among teachers. These programs were the Satellite Seminar, the NEA-Alaska Hour, NEASAT, and the Pan-Pacific Satellite Pilot Series. The report concluded that: (1) teacher-to-teacher exchange is the program's most important aspect; (2) when the course is offered for credit there is less teacher participation; (3) sufficient time must be allowed to mail materials in advance of the programs; (4) a site coordinator is essential at every location, and (5) prior local coordination should be established with all potential users of a satellite radio station to select an optimum site. The advantages of using satellites as delivery systems for NEA programs were summarized. The appendix contains sample press releases, evaluation forms, and discussion questions. (NR)

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Using Satellite Technology To Increase Professional Communications Among Teachers

A Report of Experiments Conducted by The National Education Association

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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National Education Association Program for Professional Excellence

USING SATELLITE TECHNOLOGY TO INCREASE PROFESSIONAL COMMUNICATIONS AMONG TEACHERS

A Report of Experiments Conducted by

The National Education Association

August 1975

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Foreword

This report describes the satellite demonstrations/experiments conducted by the National Education Association during the school years 1973-1974 and 1974-1975, in conjunction with the National Aeronautics and Space Administration, the National Library of Medicine, the Alaska Broadcasting Commission, and the Pacific PEACESAT Network.

The report is in three parts: Part One, a general description of each of the demonstrations; Part Two, an evaluation of the results of the demonstration, and Part Three, an exhibit of press releases, articles and other materials pertaining to the demonstrations. Included under separate cover is a videocassette describing the NEA Satellite experience to date. This videocassette was exhibited in continuous showing at the 1975 annual convention of the NEA in Los Angeles July 2-8, 1975.

The National Education Association wishes to acknowledge the encouragement we received from interested individuals at the National Aeronautics and Space Administration and at the Joint Council for Educational Telecommunications, including especially Wasyl Lew (NASA) and J. Russell Burke and Frank Norwood (JCET).

The National Education Association is grateful for the opportunity provided by NASA to undertake these experiments.

John D. Sullivan, Director
Instruction and Professional Development
NATIONAL EDUCATION ASSOCIATION

In Appreciation

The National Education Association wishes to express its appreciation to the National Aeronautics and Space Administration for providing the use of its ATS-1 satellite for these experiments and to the National Library of Medicine for the use of its studio and terminal facilities in Bethesda, Maryland for the Washington, D. C. transmissions. The NEA is also indebted to the PEACESAT project at the University of Hawaii and the State of Alaska's Office of Telecommunications for making their facilities and staff available for the experiments.

Special thanks are expressed to the following individuals who rendered exceedingly valuable advice, support and assistance in these demonstrations/experiments:

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Frank Norwood, Executive Secretary
J. Russell Burke, Consultant

New Zealand Educational Institute

E. J. Simmonds, National Secretary

Fijian Teachers Association

Esiteri Kamikamica, General Secretary

Hawaii State Teachers Association

Abe Kahui, President
Betty Jenkins, Teacher, Waialua, Hawaii and Chairperson, Professional Standards and Improvement of Instruction Committee (PSI)
Grace Noda, Teacher, Honolulu, and Member, PSI
Ralph Kiyosaki, Executive Secretary
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Janice Colbert, Manager, Bicentennial Activities, NEA

NEA Management

Terry Herndon, Executive Secretary, NEA
Robert McClure, Manager, Instruction and Professional Development
David Darland, Associate Director

NEA Instruction and Professional Development Satellite Team

Special thanks go to the following NEA Instruction and Professional Development staff members who served as the satellite team responsible for conducting the experiments:

Harold E. Wigren, Telecommunications Specialist and Satellite Experiment Coordinator, NEA, responsible for the overall planning, implementation, and evaluation of the experiments

Frances Quinto, Professional Associate, IPD, responsible for content coordination of the experiments

Neal Hall, Manager of the NEA Audiovisual Studios, responsible for technical coordination of the experiments

Jessie Muse, Professional Associate, IPD, responsible for Cultural Pluralism and Student Participation programs on NEASAT

Ethel Burstein, Secretary, IPD, secretary to the project.

Goals of the Experiments

Why is the National Education Association, a professional association of nearly 2 million teachers, involved in satellite communications? What long-range goals does the Association have for satellite communications in the years ahead?

The NEA is involved in satellite communications for several reasons:

1. to insure that teachers have a voice in shaping governmental and educational policies concerning future uses of satellites in education. As potential prime users of satellite communications in education, teachers have a considerable stake in decisions that are made about its development.

2. to give teachers a leadership role in determining how satellites will be used in education and in projecting education's future requirements for satellite space. These decisions should be made by teachers rather than by industry.

3. to gain experience now in using satellite communications as a delivery system for the Association's professional development activities nationwide, especially for its members in remote, isolated areas of the United States. A nationwide domestic satellite system is presently coming into being under the guidance of the Federal Communications Commission. The Association may need to use this system in its information dissemination program to teachers and the general public.

4. to lay the foundation for a global communications system for education, enabling teacher associations throughout the world to share resources and develop common strategies for the solution of global educational problems. Satellites can serve as an essential vehicle in fulfilling NEA's Bicentennial theme: "A Declaration of Interdependence: Education for a Global Community."

5. to guarantee that this newest technology is used for constructive purposes in enhancing and respecting the cultures and rights of all peoples of the world.

The specific short-term goals for the experiments undertaken during the past two years can be summarized as follows:

- to provide continuing education opportunities for teachers in remote areas

- to explore the potential of satellite communications for building a global community of interests among teachers

- to make possible the interchange of ideas between teachers in remote areas

- to test the feasibility of satellite communications as a viable delivery system for the Association on a long-term basis and thus to assess the needs of the teaching profession for satellite space

- to reduce isolation of rural teachers and provide an incentive for individuals to teach in these areas

- to create an awareness among teachers of the possibilities satellites hold for education in the future.

PART ONE

Descriptions of the Experiments

DESCRIPTIONS OF THE EXPERIMENTS

During the past two years the National Education Association has conducted four satellite experiments designed to improve professional communications among teachers. The four experiments are the following:

During the 1973-1974 School Year (for Alaska teachers)

1. Satellite Seminar--a three-hour credit course designed primarily for teachers in small villages who do not have access to community colleges or other professional development opportunities. This course, offered weekly, was accredited by the University of Alaska, School of Education.

2. NEA-Alaska Hour (NEATS; News Every Alaskan Teacher Seeks)--an hour-long discussion/news series once a month dealing with crucial issues facing American education and the National Education Association. This was offered primarily for Association leaders in Alaska's larger cities but was open to all teachers in the network.

During the 1974-1975 School Year (for Alaska, Hawaii, and South Pacific teachers)

3. NEASAT--a biweekly teacher center of the air, planned, implemented, and evaluated by teachers, as an open learning and professional growth opportunity for teachers in Alaska and Hawaii.

4. Pan-Pacific Satellite Pilot Series--an experimental series of three programs offered at monthly intervals during the spring of 1975 for teacher leaders in Alaska, Hawaii, Fiji Islands, New Zealand, and Washington, D. C. This series has been conducted as part of NEA's observance of the American Bicentennial in furtherance of the NEA Bicentennial theme: "A Declaration of Interdependence: Education for a Global Community." On the basis of these pilot programs, the NEA has requested and has been granted permission by NASA to air a monthly series on ATS-1 beginning in October 1975 and continuing through May 1976.

# # # # #

Use of Terminals, Facilities and Time

Each of the above experiments was conducted on ATS-1 as a satellite radio experiment during part of the time period allocated by NASA to the State of Alaska. The National Library of Medicine made its transmitter, studio facilities, and earth terminal available without cost to the Washington headquarters staff of the National Education Association for the experiments.

The PEACESAT staff and facilities in Honolulu, Suva, Fiji, and Wellington, New Zealand, were made available for the Pan-Pacific series through the cooperation of the PEACESAT network and the University of Hawaii, University of the South Pacific in Fiji, and Wellington Polytechnic (institute) in New Zealand. The Alaska terminals and satellite radio facilities were provided through the cooperation of the Alaska State Office of Telecommunications.

The time for each of the three experiments was 0500 Zulu (GMT) or 12 midnight (EST, Washington, D. C. time), 9 p.m. in Juneau, 7 p.m. in Fairbanks and Honolulu, and 5 p.m. the next afternoon in Suva and Wellington. The time allotted for the Satellite Seminar and for the Pan-Pacific series was one hour and a half. The NEA-Alaska hour and NEASAT were each one hour in length. Teacher leaders in each of the participating locations were the participants, with guest resource persons being invited for specific programs. A capsule summary of each of the four programs follows:

NEA SATELLITE EXPERIMENTS DURING 1973-1974

On August 23, 1973, the NEA called a planning session in Anchorage to determine the details of the experiments which would be conducted during the 1973-74 school year. Representatives from 8 of the Alaskan villages/cities which were judged, on the basis of previous satellite demonstrations, to be the most likely to participate in experiments conducted the following year, attended the session. They were joined by officials from the University of Alaska, representatives of the Alaska Educational Broadcasting Commission, the Alaska State Operated Schools, the Northwest Regional Educational Laboratory in Portland, Oregon, the Alaska Rural Teacher Training Corps, and the Satellite Coordinator for the Governor's Office. NEA-Alaska and NEA Central in Washington were coordinators of the meeting.

As a result of the meeting, two major satellite experiments were identified and planned: Satellite Seminar, a credit course designed primarily for teachers in small Alaskan villages who do not have access to community colleges or other professional development opportunities, and NEATS, an NEA-Alaska hour on current critical issues facing the Association and the nation's schools. This latter series was to be designed especially for teachers in larger cities but open to all teachers on the network.

The session was called by NEA to "put all the pieces in the puzzle together," so that all agencies concerned could plan together from the start. In short, this was an Herculean effort to bring about coordination between all the groups involved.

It is ironic that despite this effort one of the series, Satellite Seminar, was plagued from the outset by lack of coordination! This was due largely--as will be seen later in this report--to the fact that some of the agencies involved were unable to carry out their responsibilities in the time period that had been agreed upon.

Each of these series is described herewith.

Satellite Seminar 1973-74

This experiment was conducted during the school year 1973-1974 on a weekly basis for a 13-week period. The seminar began as an informal round table of the air but by mid-term became a formal credit course in order to comply with the wishes of most of the participants. The course was accredited for three semester hours with the School of Education, University of Alaska.

Despite requests of participants in the seminar during the first term for a credit course, only 12 students actually enrolled in the course. NEA-Alaska reports that 40 teachers had previously indicated that they wished to sign up for such a course if offered by satellite, but the number of enrollees dwindled to 12 by the time the course began.

This course had a turbulent beginning. The University found it necessary to switch instructors just before the start of the series, after announcing the name of the instructor initially assigned. Enrollment forms were not sent to

the villages until after the course had begun. Although the newly assigned instructor was a most competent teacher educator, she was new to broadcasting and, in addition, there was not sufficient time for her to prepare for opening night. Further, she had not been provided with the evaluation of the previous year's informal non-credit satellite seminar in which participants had recommended a number of features which they hoped would be included in future broadcasts.

Enrollees were required to complete three basic assignments: (1) application papers which were short follow-up papers to each presentation, (2) a project, flexible enough to meet individual needs, (3) an open-book test for those signed up for graduate credit. Anyone could audit the course who wished but only three individuals did so. Of the 12 enrollees for credit, two completed all three assignments by the end of the course, 5 persons complied with the requirements for application papers, 2 completed the final project, and 5 completed the open-book test. Several of the participants finished their assignments during the summer and qualified for credit at that time. An evaluation of the course is dealt with in the next section.

NEA-Alaska Hour (NEATS: News Every Alaska Teacher Seeks), 1973-74

The purpose of this series was to provide opportunity for elected teacher leaders in Alaska to communicate with their peers and with NEA-Central regarding a wide variety of issues and problems facing American education in general and Alaska in particular. There were 7 monthly one-hour programs in the series dealing with such topics as accountability; merit pay; the educational voucher plan, which had been proposed for widespread adoption by America's schools; teacher evaluation; pending federal legislation on copyright law revision and its effect on teachers; and a highly popular session with the President and Executive Secretary of the NEA entitled "A Conversation with Helen Wise and Terry Herndon." The final program dealt with a problem of overriding concern to Alaskan teachers, "Decentralization of State-Operated Schools." A special feature of the series was the mailing in advance to each participating village of reprints of articles from Today's Education and articles from other professional journals on topics to be discussed. These were materials which participants would not be likely to find available in their villages.

This series was marked by an unusually large number of medical emergencies which caused several of the programs to be interrupted while the search for doctors was carried on. Once found, the doctor and village health aide needed to speak to each other at frequent intervals during the program while diagnosing the patient's difficulty in each case and arranging for evacuation of the patient, if need be, from the village. Participants in the NEATS series had been alerted to the possibility of such emergencies (a condition of NEA's use of the NIH facilities) and were most understanding whenever an emergency did occur. The emergencies took away from the total time which was available on a given night for the NEA series, but on several occasions the Goddard Space Flight Center interrupted the program to indicate that they were extending the time for the NEA program to compensate for the time lost during the emergency periods. This was greatly appreciated.

The series aimed to provide opportunity for NEA to build a closer relationship between its elected leadership in the field and state and national association leaders, especially where distances often present insurmountable communications problems in building a united, informed profession. There is nearly universal agreement that the series successfully accomplished its objective.

SATELLITE EXPERIMENTS DURING 1974-1975

NEASAT 1974-75

This biweekly experiment has been conducted as an airborne teacher center built around teacher needs which they themselves identified as the series progressed. The experiment was planned by teachers, for teachers, implemented by staff with teacher input, and evaluated by teachers. This has, therefore, been a unique experiment inasmuch as most teacher professional growth programs are offered by administrators for teachers, rather than by teachers for teachers.

A planning group, composed of 18 teacher representatives from 11 villages and cities of Alaska and Hawaii, met on August 21, 1974, in Anchorage to plan the entire series. NEA underwrote the travel costs and housing for the planning group. Topics were selected for each of the 14 association hours from October through May, and the three major groups participating in the experiment chose the programs for which they were willing to accept responsibility for providing the moderator and for serving as the major resource for program planning. The major resource group assumed responsibility for selecting mini-presenters for their programs, drafting questions to be sent out in advance to all participants, and providing a panel of "experts" (usually peers or specialists in a given area) to be on hand to answer questions from participants. Other features of the series were as follows: (1) a list of discussion questions with related print and nonprint materials are sent to the villages in advance of the program; (2) a 5-minute news feature on latest happenings in education and at NEA Central in Washington is held at the beginning of each program; (3) participants are encouraged to ask questions on any topic on which they need information either on the subject for the evening or on some other topic (If no resource person in the studio or elsewhere on the network is able to answer the question, the coordinator in Washington arranges to find the answer the next day and write that participant and/or relay the answer on next week's broadcast.); (4) tapes are made of each program in the series and circulated to any group or individual who was unable to be present (in person) for a given program, provided this person requests the tape from NEA. This series was well received.

This series also had an unfortunate beginning. The transmission and reception facilities at NIH in Bethesda were completely inoperative for the first program (on October 16) and for 30 minutes of the second program (on

November 6); hence, the newscast for which NEA was responsible could not be presented, and the major resource person from NEA's Executive Office was unable to participate. As it happened, the first night's audience was the largest of the series. Some participants may have become discouraged with the repeated attempts made on both of these programs to make contact with Bethesda and may have felt they should wait to participate until such time as the transmission could be improved. The transmissions were weakest in October and November and gradually improved from then through the month of May. The most acceptable explanation of this is that the time of the northern excursion of the satellite became gradually closer to the time of the NEA experiment as the months progressed, resulting in gradually improving look angles and path conditions. It should be understood that ATS-1 had developed a substantial inclination of about 6° during its 8 years in orbit.

Pan-Pacific Satellite Pilot Series, 1974-75

This experiment was an outgrowth of NEASAT. The interchange between Alaska and Hawaii was so successful in opening new avenues of mutual interest between teachers in both states that the NEA Bicentennial Commission recommended that the series be broadened and expanded Pacific-wide if possible. The NEA Bicentennial theme, "A Declaration of Interdependence: Education for a Global Community," served as a springboard for a Pan-Pacific demonstration. The Commission therefore selected satellite communications as one of 12 major Bicentennial activities to be undertaken during the Bicentennial year. In preparation for this and to test the feasibility of conducting such an experiment, NEA obtained permission to air a series of three programs on a pilot basis. If successful, the series would be offered on a monthly basis during the 1975-1976 Bicentennial year. The pilot programs have been judged as quite successful, and NASA has approved NEA's request--subject to several conditions which are reasonable and which can be met--to begin in November 1975.

Participating in the pilot series were, in addition to stations in Alaska and Hawaii, Wellington, New Zealand; Fiji Islands; Raratonga; Niue; Honiara in the British Solomons. Noumea, New Caledonia also participated on one program.

The regular Pan-Pacific experiment to begin in November likely will include, in addition to teachers in the above-mentioned locations, teachers in Papua New Guinea, Saipan, and possibly American Samoa.

All three of the Pan-Pacific pilot programs attracted excellent audiences. The topic, "Community Involvement in the Work of the Schools," elicited an interesting opening comment from the discussion leader, E. J. Simmonds, the national secretary of the New Zealand Educational Institute:

> "We will focus the program on the tentative questions [received in the mail] although there is an underlying theme that I would like to keep in mind. That is, how can teachers be protected against unwarranted interference by parents in matters which are essentially the teacher's responsibility? In New Zealand we agree that every possible effort should be made to promote close cooperation between parents and teachers in the interests of pupils, but know only too well that care must be taken to avoid 'the butcher, the baker . . .' from interfering in such matters as staff appointments and selection of teaching materials."

Seminar participants were heartily in accord with this position. The topic, "Community Education," focused on ways teachers might broaden their responsibilities to make the community one large learning laboratory for students and adults, wherein education becomes a concept rather than a place. Grace Noda from Hawaii State Teachers Association, serving as the major resource person for the series, gave valuable insights in this area, based on the Community Education model developed in Honolulu. The third topic, "Teaching in a Culturally Diverse Classroom," was also very well received. Dr. Virginia Chattergy of the University of Hawaii brought to the subject expertise and much practical experience which made the program relevant to teachers not only in the far North but in the South Pacific as well. The same topics are high on the list of topics suggested for inclusion on next year's seminar. Betty Jenkins of Waialua, Hawaii effectively served as the coordinator.

PARTICIPATION IN THE EXPERIMENTS

When the NEA experiments began in the school year 1972-1973, only 8 locations in Alaska participated. The number grew gradually to 13. In the fall of 1973, ground terminals were removed from several participating sites in connection with a relocation of transmitters to other villages which caused several regular participants in the previous year's NEA experiments to drop out. Included in this group were Barrow and Nome. Both of these sites had regular participants in earlier Satellite Seminar broadcasts during 1973-1974. (See Figure 1.) In the fall of 1974, NEA inquired as to whether the intensive (two-way audio) sites being used on ATS-3 as part of the HET ATS-6 experiment could be adapted so that teachers in their villages might participate in the NEA series on ATS-1, if they wished to do so. The Office of Telecommunications for the State of Alaska was most cooperative and arranged to install crystals in these 13 terminals with the result that 34 Alaskan villages can now receive and transmit on the ATS-1 signal and participate in the NEA experiment if they so desire.

Of the 34 Alaska stations equipped this year with two-way satellite radios, 19, or 56 percent, participated in one or more programs. (See Figure 2.) Fort Yukon's equipment has been inoperative all year. The other 14 were contacted repeatedly but did not respond to any of the communications sent them. Shown herewith in Figure 3 is a participation chart on both the NEASAT experiment conducted this year (1974-1975) and the Pan-Pacific Pilot Series conducted this spring (1975). Shown also, in Figure 4, is a schedule of the programs for NEASAT and for the Pan-Pacific series showing dates and topics for each program as well as the location designated as the major resource for each of the programs. The major resource designee assumed the responsibility for chairing the program and for securing the major resource person(s) for the topic selected by the entire group for that particular evening.

An analysis of the number of participants for each of the topics in both experiments reveals some interesting data:

1. The Pan-Pacific pilot series had by far the largest participation of any of the experiments, 30 on two of the dates and 34 on the other date. The Pacific sites, other than Hawaii, which were not participants in the NEASAT series accounted for a substantial portion of the totals:

	Program #1 Feb. 10	Program #2 March 10	Program #3 Apr. 7
Alaska	11	4	4
Pacific	15	16	18
Bethesda	8	10	8
	34	30	30

2. In the NEASAT series, the opening night session on "Teaching in a Multi-graded Situation" drew the largest number of participants of any program. Thirty-one participants were tuned in. It is not clear whether this was because it was "opening night" or because the topic was of universal interest. The first night was marred by the failure of the transmission and reception facilities at Bethesda which made it impossible for the 6 NEA staff persons present to participate in the discussion or to give the opening newscast which had been requested by the planning committee in its August session in Anchorage.

3. The topic of most interest, judging from the evaluation session conducted via satellite, was "What Works for Me in the Classroom." This program also rated highest on the evaluation reports. The major resource site for this program was Hawaii and the featured resource person was Barbara Edwards who discussed how newspapers could be used effectively as a teaching tool. This program was very practical and showed an activity every teacher could adopt in his/her classroom.

4. The next most popular NEASAT topic was "Native Land Claims," a topic which was certain to generate a great deal of interest in both Alaska and Hawaii. The program dealt with the impact of Native land claims on teachers and on the classroom. The similarities and differences in the Alaska and Hawaii land claim problems were also interestingly developed.

5. The other topics on the NEASAT series, in order of the degree to which they attracted participants, were the following:

   Cultural Pluralism I
   Cultural Pluralism II
   Evaluation of the Series and Planning for Next Year; Needs Assessment
   Governance of the Teaching Profession
   Cultural Pluralism III
   Alleged Teacher Surplus (RIF)
   Student Participation
   Delegate Assembly Concerns
   Teacher Evaluation
   Federal and State Legislation Affecting Teachers
   Utilization of Para-Professionals

ALASKAN LOCATIONS PARTICIPATING IN NEA'S 1973-1974 EXPERIMENTS

Satellite Seminar (credit course)

Regular weekly participants

- Chalkyitsik - 1 teacher
- Fort Yukon - 1 teacher
- Galena - 2 teachers
- Juneau - 3 teachers
  1 staff person
- Nome - 2 teachers
- Nulato - 2 teachers

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# # # #

NEATS (Association Hour - Teleconference)

Regular monthly participants

- Anchorage - 7
- Barrow - 4
- Bethel - 1
- Chalkyitsik - 2
- Fairbanks - 1
- Fort Yukon - 2
- Galena - 2
- Hawaii - 3
- Juneau - 5
- Nome - 1
- Nulato - 2

30

Participating Occasionally

- Allakaket
- Anaktuvuk Pass
- Huslia
- Ruby
- Tanana
- Venetie

ALASKAN LOCATIONS EQUIPPED WITH TWO-WAY SATELLITE RADIOS 1974-1975

*Allakaket
Anaktuvuk Pass
*Anchorage
*Aniak (HET)
*Angoon (HET)
*Arctic Village
*Beaver
*Bethel
*Chalkyitsik
Craig (HET)
*Eagle
*Fairbanks
Fort Yukon (E I)
Galena (HET)
*Hughes
Haines
Huslia
*Juneau
Koyukuk
*McGrath (HET)
Minto (HET)
Nenana (HET)
Nikolai (HET)
*Nulato
*Petersburg (HET)
*Ruby
Russian Mission (HET)
St. Paul Island
Stevens Village
Sleetmute (HET)
*Tanana
Valdez (HET)
*Venetie
*Yakutat (HET)

*Locations participating one or more times on one of the NEA experiments during 1974-1975

HET: ATS-3 terminals used in the Health, Education Technology ATS-6 experiment conducted this year in the Rocky Mountains, Appalachia and Alaska. These terminals have now been adapted so they are able to transmit and receive on ATS-1 as well as on ATS-3.

EI: Equipment inoperative all year

Participation Chart

	NEASAT Programs, 1974-1975														Pan-Pacific			
	Oct 16	Nov 6	Nov 20	Dec 4	Dec 18	Jan 15	Feb 5	Feb 19	Mar 5	Mar 19	Apr 2	Apr 16	May 7	May 21	Feb 10	Mar 10	Apr 7	Totals
Alaska																		
Allakaket	1								1				1					3
Aniak			1	1	1	1	1	1	1	1	2		1		1		1	13
Anchorage	8	2	1	1	1	1	2						3	3	4		1	27
Angoon			1															1
Arctic Village	1			1		1	H											4
Beaver		1		1		1		1	1	H		H			1			8
Bethel	3													1				4
Chalkyitsik						1												1
Eagle						1									1			2
Fairbanks	3	1	1		1	2	1	2					1	2	2			16
Fort Yukon	EI																	
Hughes						1			1									2
Juneau	2	3	2	1	4	2	1	1	1	2	1		6	2	1		1	30
McGrath			1	1	1	1										2		6
Nulato	2			1			1						2	1	1	2	1	11
Petersburg		4	1			1	1											7
Ruby														1				1
Stevens Village				H								H						2
Tanana	1	3		1				1					1	1				8
Venetie		1		1					1		H	H						5
Yakutat		1																1
Bethesda, Md.	6 T	2 T	2	2	1	2	2	2	3	2	1	5	7	2	8	10	8	65
Hawaii	4	2	2	4		7	3	6	1	R	1		2	2	6	3	4	47
Fiji															2	3	2	7
Honiara, Br. Solomons																2		2
New Zealand															4	4	5	13
Niue															3	2	3	8
Noumeau, New Caledonia																	2	2
Raretonga, Cook Islands																2	2	4
Totals	31	20	12	16	9	22	13	14	10	6	6	8	24	15	34	30	30	300

EXPLANATION OF SYMBOLS:
H -- Health Aide only in attendance
R -- Recorded only; no participants
T -- Transmission difficulties (The Bethesda terminal, including both receive and transmit facilities, were inoperative on this evening.)
EI - Equipment inoperative all year

PART ONE, Figure 3

1974-1975 - NEA Satellite Alaska-Hawaii Association Hour (NEASAT)

Wednesday Dates	Prime Responsibility	Topic(s)
Oct. 16	Alaska	Teaching in a Multigraded Situation Professional Concerns
Nov. 6	Hawaii	Cultural Pluralism I
Nov. 20	Alaska	Alleged Teacher Surplus (Reduction in Force Negotiations)
Dec. 4	NEA-IPD	Cultural Pluralism II
Dec. 18	Hawaii	Delegate Assembly Faces Professional Issues
Jan. 15	Alaska	Native Land Claims (1) Impact on the Classroom (2) Hawaii's Similarity to Alaska
Feb. 5	Alaska	Cultural Pluralism III
Feb. 19	NEA-IPD	Governance of the Profession (1) Teacher Certification (2) Professional Teaching Practices Commission (3) Teacher Education Certification Advisory Board (4) Employment Practices (5) Dismissal Problems
March 5	NEA-IPD	Student Participation (1) Curriculum Development (2) School Rules and Regulations (3) Course of Study (4) Teacher Evaluation
March 19	Alaska	Teacher Evaluation (1) Professional Growth (2) Contract Renewal
Apr. 2	Hawaii	Federal and State Legislation Affecting Teachers (1) Federal (2) State (Alaska and Hawaii) (3) Local Regulations
Apr. 16	NEA-IPD	Utilization of Para-Professionals (1) Hawaii (2) Alaska (3) NEA and Elsewhere
May 7	Hawaii	Innovative Practices: What Works for Me in the Classroom--The Use of the Newspaper as a Teaching Tool
May 21	NEA-IPD	NEA Association Goals and Objectives (1) NEA Needs Assessment (2) Evaluation of This Year's Satellite Programs and Future Plans for Satellite Use

1975

NEA-Satellite Pan-Pacific Hour

Major Resource	Monday Dates	
NEA and Hawaii	Feb. 10	Community Involvement in the Schools I
New Zealand	Mar. 10	Community Involvement in the Schools II
Hawaii and Fiji	Apr. 7	Teaching in a Culturally Diverse Classroom

Time of broadcast for all of the programs (NEA-Satellite Alaska-Hawaii Association Hour /NEASAT/ and NEA-Satellite Pan-Pacific Hour) listed on these two pages: 7-9 p.m. Alaska Standard Time (midnight, to 2 a.m. the following day in Washington, D. C.).

Some Noteworthy Aspects of the NEA Experiments

Overall, the NEA experiments might be characterized as having several unusual features not present in other experiments. These might be summarized as follows:

1. They are aimed at a teacher audience for professional development purposes.

2. They are conducted at midnight or 1 a.m. Washington time, which is 7 p.m. Fairbanks and Honolulu time and 4 p.m. the next afternoon New Zealand time!

3. They bring together the Alaska and the PEACESAT networks with Washington, D.C.

4. The facilities used at the Washington end are those of the National Library of Medicine.

5. Villages and islands participating "take turns" in providing major resource persons for each program in the series, so that the programs do not originate and emanate from Washington as the fountainhead of all knowledge.

6. Discussion questions and support materials are sent out in advance of each program so participants can be prepared in advance.

7. A planning session is held by approximately 10 representatives from the participating locations at a central point, followed by one or more follow-up sessions by satellite prior to the start of the series. This has assured that teacher input would be obtained.

8. The NEA has funded each of its satellite experiments to date from its own resources, chiefly from membership dues. It has not sought outside funding from the U. S. Office of Education or from a foundation. The Association has been fortunate, however, to have been the beneficiary--for the purposes of this experiment--of free studio and facilities at the National Library of Medicine and the use of the terminals and facilities of the Alaska and PEACESAT networks as well as those of the University of the South Pacific and of Wellington Polytechnic. For these we are most grateful. The NEA has underwritten staff and program costs as well as costs for temporary services of terminal operators and engineers at NIH and NEA. In addition, NEA has underwritten costs for publications concerning the project.

NEA's Future Activities in Satellite Communications

NEA's future plans for satellite communication are outlined in two proposals recently submitted to NASA:

1. A proposal for the expanded Pan-Pacific satellite series mentioned early in this report, for the school year 1975-1976. Permission has been granted by NASA for this experiment subject to certain conditions which NEA has agreed to meet.

2. A proposal for a joint Canadian-U. S. two-way audio-video satellite demonstration in connection with NEA's annual convention, in Miami in June 1976. NEA's Representative Assembly has approved NEA funds for this demonstration which will culminate NEA's observance of the American Bicentennial Celebration.

Consideration is also being given to an experimental series on CTS during the 1976-1977 school year. These experiments--in addition to the ones already carried out--will enable NEA to gain experience in using satellite communications for Association programs on a regular basis once the domestic satellite systems become operative.

In summary, the possibilities of using satellite communication as a long-term delivery system for NEA programs are threefold:

1. Using CTS or ATS-6, beginning in September 1976, for experimental programs

2. Leasing satellite time on one of the commercial domestic satellite systems which are going into service now

3. Leasing satellite time from the Public Service Satellite Consortium should the consortium develop to a point where it can provide this service.

PART TWO

Evaluation of the Results of the Experiments

EVALUATION

In the opinion of the NEA and NEA-Alaska staffs and from the evaluation reports received from the field, three of the NEA experiments--NEATS, NEASAT, and the Pan-Pacific pilot programs--were highly successful. The other experiment, SATELLITE SEMINAR, the credit course via satellite, met with mixed reactions. Two-thirds of the participants felt it worthwhile and should be continued. The other one-third were of the opinion that the course would need some major overhauling in subject matter content and organization before they would recommend it to others.

Valuable lessons, however, were learned from all of the experiments. This section of the report will deal first with the overall lessons learned from the experiments--information which we hope will be beneficial to future experimenters. Following this, an analysis will be made of Satellite Seminar in an attempt to find clues as to why this series was not as successful as the other three.

LESSONS LEARNED

Among other things, the NEA, as a result of these experiments has learned the following:

1. If the programs are to be successful, they must have maximum involvement of teachers in their planning and implementation. Teachers must feel that they are part of the decision-making process and have some way to determine or affect what happens. The emphasis should be on practicing teachers' determining the content of their own professional development.

2. The most important aspect of the experiments has been the interactive nature of the programs--the teacher-to-teacher exchanges. Repeatedly, teachers comment in their evaluation reports that this to them is the strongest feature of satellite communications.

3. Teachers are more interested in exchanging ideas and teaching strategies with each other than with "experts" from Washington or from some other place. Each teacher who participates thinks of himself or herself as an expert with something to contribute. A resource person in Washington or Baltimore--or even Seattle--has probably not taught Eskimo children in an Alaskan village at 50 degrees below zero, even though he may be an authority on open learning! Of course, depending upon the subject, teachers have on occasion welcomed an expert on the program.

4. There is great competition in the villages and on the islands for the time of the teachers; hence it is difficult to maintain a consistent audience week after week. This came as a surprise to us--that so much was happening to compete for audience time, especially after the novelty wore off.

5. Many teachers enjoy the isolation of Alaska. They prefer to be in a non-structured environment, out-of-doors, free from prescriptions, the world of university courses and other in-service training opportunities. They resist the outside world's impinging on the peace and beauty of the Alaskan experience. They are all not waiting at the other end of the line for those magic words from Washington or elsewhere in order to save them from their plight! While satellite communications can reduce the feeling of isolation many teachers experience, other teachers would not find this in itself a great incentive to teach in these areas. They are comfortable and content in the situation they have found in the village, but they do welcome the availability of outside resources "on call."

6. Beware of the nature of course requirements when the course is offered for credit. Several of our credit students dropped out because the assignments were too involved, too theoretical, and required too much written work to be forwarded to the University via mail. Again, we may have relied too much on the written word as the only "legitimate" basis on which to give grades.

7. Under the best conditions with regard to satellite and ground station performance, the ATS-1 signal is of adequate quality for purposes of the experiment. It was recognized at the outset that there would be circumstances where signal quality would be unacceptable because the satellite transponder was designed basically for aircraft and ship-to-shore communication, where users are skilled in interpretation of poor quality transmission. Our experience indicates that in some cases signal quality has not been suitable for our experiment. Propagation anomalies plus differences in maintenance of ground terminals by semi-skilled personnel at remote locations have contributed to the occasional unsatisfactory technical performance of the system. This was both expected and predicted.

8. It is important to allow sufficient "lead" time for mailing discussion questions and support materials to villages and islands in advance of the program. At times the mail plane is able to land in Alaskan villages only once per week in winter, and often we discovered at program time time the materials had not arrived. Consideration should be given by future experimenters to sending out such materials via facsimile.

9. A point that cannot be stressed too highly is the importance of a site coordinator to serve as a clearinghouse for the series in each village or island. This person would be responsible for making necessary arrangements for listening or viewing in advance of the program, making certain that teachers are reminded of the program time and topics, that the listening room is open and heated (or cooled) and that feedback is obtained from the participants. Such a coordinator is the "ground contact" needed to know what is happening at that location--or what isn't happening!

10. We have learned that in rural communications it is just as important (if not more important) for communications to go from the bottom up as from the top down! It is important that village people be able to produce as well as consume. They need to get their ideas out to other people as much as they need to listen or view someone else's ideas.

Example: On one previous mission to Alaska, our UNESCO team left a video tape porta-pak recorder in Stebbins, a village on the Bering Sea, after teaching the villagers how to operate it. We had urged them to tell a story visually, one they wanted others to know. When we returned, they had produced a video letter to the Governor of Alaska informing him via camera about some of the critical problems they were encountering--problems such as lack of fresh water, sanitation, and even refrigeration.

11. Alaskan teachers want to discuss topics that are of practical use for them, matters on which they can take action the next morning rather than engage in theoretical or philosophical discussions. Most Alaskan teachers are action-oriented. Alaska is that kind of place! The very nature of the society and environment in which they live forces them to deal with the immediate and survival issues. This situation we found to be less true in the Pacific where the teachers were much more inclined to speak in depth about philosophical concepts underlying their adoption of given teaching strategies.

12. Best results seem to be achieved when representatives of teacher groups who are to participate in the series can be involved in a planning session ahead of time at a central location. This enables the participants to know one another on a first name basis and develop understanding of the other's problems and concerns. It also makes for a better team effort as the series progresses. In addition, these representatives can make sure that the ideas expressed by their own groups are fully aired and become part of the total plan. In each of the series a preliminary planning session was held by satellite. This served a useful purpose but more progress was made when the key representatives had already met face to face to work out the broad guidelines for the series.

13. An essential feature of the ATS-1 experiments has been the discipline required in the use of the satellite radio. Domination by one speaker rather than the use of dialogue, would defeat the whole purpose for using the satellite. NEA experimenters have found better results when presentational materials are sent out in advance and air time is used to discuss the materials. Also, there is an ease in using this medium which develops with experience.

14. The location of transmitters in some villages prevents ready access by teachers. In some villages, the satellite radio is located in the home of the health aide whose family life must be interrupted in order for teachers to use the radio. In other villages, the satellite terminal or radio is located a considerable distance from the school or from the home of the teacher. In Bethel, for example, the satellite radio is located in the hospital which is far removed from the Bethel elementary school. Teachers there think twice before making the journey in 40° or 50° below zero weather. The Bethel teacher who serves as the satellite coordinator for both NEA experiments has recommended that the terminal and radio be moved to Kuskokwim Community College, which

has a much more central location than does the hospital (on the outskirts of Bethel). But we must remind ourselves that NEA is using the terminal facilities which belong to the National Institutes of Health and which were installed for purposes of dealing with medical emergencies.

The lesson learned here is that establishing a satellite radio station in a village requires prior local coordination with all potential users to insure that the optimum site is picked. In cases where there is no site to serve all potential users, it is obvious that some type of internal distribution system in the villages is required to take full advantage of the benefits of satellite communications.

15. Satellites, as vehicles of communications among teachers, have several important advantages as delivery systems for association programs. Among these are the following:

    . Satellites provide opportunity to build closer relationships between the individual teacher, the state association and the national staff, especially where distances present an almost insurmountable problem to effective intra-organizational communications. This is especially true where the problems being discussed require group action rather than communication on an individual basis.

    . Satellites provide opportunity for instant feedback, reaction, and sharing of ideas and problem solving between peers in widely separated locations. Teachers are able to request materials and receive them by return mail.

    . Satellites enable teachers to keep abreast of professional developments regardless of where they might be located.

    . Satellites lessen the sense of isolation many teachers feel when teaching in remote places. While some teachers enjoy the isolation, others develop "cabin fever." In some communities where only one or two teachers are assigned, teachers living alone all winter in a harsh physical environment literally climb the wall and are eager for outside contact.

    . Satellites make possible the development of a new kind of organization for problem solving--one based on a community of interests rather than on geography.

Satellite Seminar

Replies received by NEA-Alaska in a questionnaire sent to village teachers prior to the start of this satellite credit course indicated that 40 teachers wished to take advantage of the opportunity to enroll for three course credits. Of this number 12 enrolled and only half of these received a passing grade for completing the course.

The course instructor gives this evaluation of the course in a letter to NEA:

". . . My evaluation of the whole satellite program is mixed and I personally accept much of the responsibility for its demise. It has never been clear to me what part I play in the final evaluation to NASA but the following points summarize my feelings about the experience:

1) I thoroughly enjoyed the 'on the air' part of the program. I think as a 'seminar' the course operated very satisfactorily and I, for one, learned a great deal. I felt most proficient in fostering communication and least in assuring any follow-up to the 'on air' participation.

2) The initial organization of the course got things off to a very bad start. This factor undoubtedly influenced participation in a number of ways. My acquaintance with the system further hindered us--I was not contacted until a week before we went on the air. The planning stage of the program--which the University of Alaska, Anchorage participated in only at the end--did not take advantage of what had been learned through previous attempts at satellite productions.

3) There is no way of evaluating what influence offering the course for university credit had on the participation. I suspect it did influence things--and primarily negatively from their point of view and mine. With course credit went the automatic problem of follow-up which presented a major problem for both participants and instructor.

4) There were no major 'mechanical' difficulties in either the machinery or the operation which I feel contributed more than the average amount of trouble. In general reception was fantastic and the 'quickness' of the medium makes it delightful for communication. Many guests on the program mentioned feeling very ill at ease with lack of video contact. I personally found that I really wanted to <u>see</u> people but it didn't present any huge problems.

"I would like to say 'in retrospect . . .' but in actuality the problems of the 'satellite seminar' will continue until the requirements are completed for the course--so I'm not finished with the program yet. But I do have some general feelings concerning <u>how</u> things could be improved for future productions: My major suggestion would be to discourage offering the seminar for credit until such time as universities see their role as 'centers of learning' differently. The non-credit (or 1 unit, perhaps) seminar would be more conducive to participation perhaps, and would definitely eliminate many of the problems I have been worrying over all semester. Secondly, a variety of organizational plans, i.e., some shows with guests, some originating from villages, some with children participating, etc. might be more successful.

"I hope this letter doesn't appear negative--it isn't intended to be. ... Perhaps the point I am getting at is one of the most important factors which contributed to problems in this production and should receive major emphasis on any other attempts. That's <u>coordination</u>. Alaska appears (from my limited vantage point) to have more problems here than their share."

The course evaluations received from the students reflected a variety of responses to specific questions asked on the evaluation form. Some typical ones are these:

I. Were there any seminar presentations that you found particularly helpful?

.. Troy Sullivan's program on "Reading Instruction in the Open Classroom" was well done. He was familiar with radio use, sent out good dittos and followed through on each ditto. His knowledge of rural Alaska was also useful in the ideas (new ones) that were applicable.

.. Troy Sullivan's because it dealt with nitty-gritty

.. Nancy Henry's--she sent out follow-up materials that were most helpful

.. I especially liked the presentation on learning centers because that was where I felt I was weak. I also liked the opportunity to hear what teachers in the "bush" are doing.

.. I enjoyed most the ones that give everyone a chance to participate--the interchange among teachers with common problems.

.. I found the multi-discipline approach useful. It forced me to look at other disciplines.

II. How could the series have been improved?

.. By having an Alaskan Native educator for some sessions. The totally WASP orientation of "culturally different" reveals that paternalism still lives!

.. By obtaining more resource persons with experience in the bush schools.

.. By a greater rural Alaska orientation

.. By not taking so long to get started!

.. By waiting to give the assignments as you progressed in the course. Many prospective members were frightened away when you told us at the outset all the assignments for the course. (This was mentioned several times.)

.. By putting more emphasis on secondary level methods and materials and less on elementary

.. By dealing with more controversial issues

.. There was an over-abundance of send-outs when a speaker could have said the information during the program.

.. Certainly enough materials, but not many I could apply daily

.. Too many speakers--more discussions between the participants could have developed

.. Just what I asked for! I fail to see why there weren't more participants.

III. What concepts, ideas or materials will you try in the future as a result of this seminar?

.. Values clarification

.. Learning Center evaluation

.. Cross-cultural education

.. More structured openness in my classroom

.. More testing next year in my class!

.. More dramatization of the classics

.. /the books/ Sensory Experiences, by Margaret Greer, and Individualizing Instruction Through Learning Centers have been used /by me/ over and over again.

IV. The Seminar was an experiment this semester. Would you be interested in participating again or would you recommend it to a friend?

.. Yes, I would participate and would recommend it. /several responses/

.. Not unless there was a better handling of the course

.. I would take such a course. I feel the range of speakers and ideas exchanged is a rare opportunity, particularly from a remote village viewpoint. However, repeated attempts to interest 8 teachers have not met with success. The prime audience just doesn't want to take advantage.

In retrospect, the staff feels that Satellite Seminar could have been more effective in some respects:

1. The series suffered because of lack of coordination between the University of Alaska, the State Operated Schools, and NEA-Alaska. The most serious handicap was that the instructor was not selected by the University until one week before the program was to be aired. The instructor, further, had no experience with teaching a course on radio and had to learn broadcast techniques at the same time she was preparing for the course. The evaluation reports from last year's satellite seminar were not furnished the instructor until after the course had started. There was no "lead" time in which to plan between

the time the instructor was appointed and the time the course was to begin. Likewise, the decisions as to the number of hours of credit, the title of the course, and enrollment information to participants regarding the course were all lacking.

2. Teachers felt that requirements for written work were excessive, time-consuming, and difficult to meet. Some felt the requirements unreasonable; however, the instructor felt--and some teachers agreed--that the only way of knowing if any learning in the course makes a difference in the classroom is through an application of the material in some assignment to be tried out with students. In any event, whether justified or not, several teachers felt the assignments were too much to undertake and were defeated by them. However, one observer commented that teachers, when enrolled in a credit course on radio or television, should put in as much work on that course as they would if that same course were given in a lecture hall!

3. The administration of the university, likewise, should be willing to make as much commitment or more to insuring the effectiveness of a course given on radio or television as they would to a course given in a lecture hall. The instructor in this course would discourage offering the seminar for credit until such time as universities see their role as "centers of learning" differently. She felt that perhaps the non-credit (or one unit) seminar would be more conducive to participation and would definitely eliminate many of the problems which were encountered.

4. A credit course requires attendance at every session whereas informal series--such as the other three experiments--allow for more flexibility and diversity of interests. This commitment to "be tied down" one night a week for 13 weeks teachers find difficult to contemplate in their already busy lives.

5. The seminar was handicapped by a slow start, and some participants became discouraged and impatient at the outset; hence, they dropped out. In an effort to build on student needs, too long a time period was spent on deciding what the course emphases should be.

6. Teacher turnover in the villages is high. And teachers who are new to the village are busy becoming oriented to their new life-style and learning about the village and its people. Often they don't have time for anything else.

The above analysis is not to point out that credit courses on radio or television won't work! On the contrary, it is to say that such courses can be made to work only if all parties in the undertaking--university administrators, faculty, and students--have a real commitment to the total program.

In Conclusion

Finally, one might ask the same question posed by Henry David Thoreau in the late nineteenth century when the U. S. was endeavoring to complete its continental communications network, "We seem in a great hurry to build a magnetic telegraph between Maine and Texas, but it may well be that Maine and Texas have nothing to say to each other."

After nearly 100 years, we can say now that Maine and Texas, New York and California, Florida and Minnesota, have had a great deal to say to one another as they have learned to know each other's people and places better, exchanged goods and services, and developed a better understanding and appreciation for their likenesses and differences. So has it been with our satellite communications experiments.

We are now finding that Wellington, New Zealand, and Nulato, Alaska, do indeed have something to say to each other. Hopefully, as we continue to use this newest form of technology more and more effectively, we will increase not only our appreciation of one another but also our interdependence on each other in the larger global community of which we are a part.

PART THREE

Appendix

An Exhibit of Press Releases, Articles, and Other Materials Pertaining to the Demonstrations

'76 REPORT
NEA AMERICAN REVOLUTION BICENTENNIAL COMMITTEE

WHY ARE SATELLITES IMPORTANT?

Twenty years from now historians will say that satellites changed our society as much in the seventies and the eighties as television did in the fifties and the sixties. Satellites can carry any form of information that can be transmitted electronically. When we see on our television screens the words "Via Satellite," we think first of a means of transoceanic TV relay of the coronation of a world ruler, the Olympic Games, or man's giant step on the moon. But satellites are capable of much more .

Sometimes referred to as Switchboards in the Sky or as Space Telephone Poles, communications satellites are essentially signal repeaters whose height enables them to provide coverage over a very large area. They can be dedicated (designed for a single kind of service such as television relay) or they can be multipurpose (designed for such varied communications services as data transmission, computer linkage, information networking, television, or telephone and telegraph).

Perhaps most exciting, satellite technology is a major component of a burgeoning communications revolution in the worldwide transmission and distribution of information. The other components of this revolution are cable television, television cartridge and radio cassette systems, and computers. When satellites are combined with these technologies, a telecommunications system will eventuate that will make possible new dimensions in the storage and retrieval of information. It will be a system the range and possibilities of which cannot be matched or duplicated by existing ground transmission systems. Most particularly the marriage between satellites and cable television will open fantastic possibilities in the exchange of materials and resources between schools in all parts of the nation and eventually the world. Satellites form the linkages that are essential to effective cohesion for the system.

For teachers, the communications satellite becomes an Aladdin's lamp through which they can command resources from over the entire globe. At long last, the teacher will be able to say: "The world is my classroom, and the classroom <u>is</u> the world."

WHY SHOULD NEA BE INVOLVED?

NEA needs to be involved in satellite development for several reasons:

1. to insure that teachers have a voice in shaping governmental and educational policies concerning future uses of satellites in education. As prime users of satellite communications in education, teachers have a considerable stake in decisions that are made about its development.

2. to give teachers a leadership role in determining how satellites will be used in education and in projecting education's future requirements for satellite space. These decisions should be made by teachers rather than by industry.

3. to gain experience now in using satellite communications as a delivery system for the Association's professional development activities nationwide, especially for its members in remote, isolated areas of the United States. A nationwide domestic satellite system is presently contemplated by the Federal Communications Commission. The Association needs to use this system in its information dissemination program to teachers and the general public.

4. to lay the foundation for a global communications system for education, enabling teacher associations throughout the world to share resources and develop common strategies for the solution of global educational problems. Satellites can serve as an essential vehicle in fulfilling NEA's Bicentennial theme: "A Declaration of Interdependence: Education for a Global Community."

5. to guarantee that this newest technology is used for constructive purposes in enhancing and respecting the cultures and rights of all peoples of the world.

HOW WILL SATELLITES BENEFIT THE CLASSROOM TEACHER?

As satellite technology and capabilities develop--

..... Teachers will have access to outstanding resource persons for their classrooms, no matter where these persons are located.

..... Teachers and students will be able to exchange ideas with their peers even when separated by mountains and vast oceans, hundreds or thousands of miles away.

..... Teachers in an inner city on the East Coast will be able to trade ideas and teaching strategies with teachers in an inner city on the West Coast, building on common needs rather than on common geographical locations.

..... Students in an American school will be able to study a foreign language directly with a native teacher in another country. In turn, foreign students will be able to learn English from an American teacher.

..... Teachers will be able to take courses for credit in their own living rooms whether or not there are colleges available in their communities.

..... Satellites will make possible continuing education of all types for teachers and other citizens and increase the need for teachers who are not only experts in subject matter content but are also skilled television performers.

..... Satellites will serve to interconnect cable television systems and make possible a nationwide cable/satellite network for education, enabling teachers to "dial up" instructional materials on demand from libraries or a central resource bank for use when and as needed in their classrooms.

..... Teachers will be able to work more closely with individual students because, in the satellite-linked classroom of the future, teachers will be able to assign the more rote aspects of their job--drill and practice routines--to computers.

..... Satellites, linked to computers and facsimile equipment, can make it possible for a central resource center to accept requests from teachers at the end of a school day; process the requests; and that night transmit printed matter, photographs, charts, and drawings to schools for use the next day.

..... Satellites will, by their very capabilities to reach millions of miles, open new dimensions in the teaching of interdependence, international understanding, and world peace.

HOW IS NEA USING SATELLITES?

Present Experiments

The NEA is currently involved in two satellite experiments with NASA:

.. a two-way satellite radio hour biweekly with Association leaders in Alaska and Hawaii. Using the facilities of the National Institutes of Health in Bethesda, Maryland, NEA conducts a teacher center of the air for its members in 34 Alaskan villages and in Honolulu. Members take responsibility for each program and share their own expertise with one another about what works for them in the classroom. Typical topics range from Open Classrooms, Cultural Pluralism, Governance, Teacher Evaluation, Underutilization of Teachers, Federal and State Legislation, and Use of Paraprofessionals.

.. a monthly Pan-Pacific satellite radio series with teacher associations scattered throughout the Pacific area. Teacher association leaders in Alaska, Hawaii, and NEA Central interact via the satellite with teachers in New Zealand, Fiji Islands, Rarotonga, and the British Solomons. This series will be continued as part of the NEA Bicentennial celebration during 1975-76.

Future Plans

.. During the 1975-76 school year, the NEA plans to expand the Pan-Pacific satellite series to include selected locations in Appalachia and Pacific locations such as Saipan, Papua New Guinea, and American Samoa, to bring about an exchange of ideas in instruction and professional development between teachers in an area roughly nearly one-third of the earth.

.. The NEA Bicentennial Commission, in cooperation with NASA, is planning a major demonstration on the Canadian experimental satellite, Communications Technology Satellite, at the 1976 NEA Convention in Miami. This will be a two-way television experiment interconnecting Association leaders and students attending the convention with Canadian Teachers Federation leaders and students in Ottawa. This will be a live broadcast wherein each group will see and interact with the other.

.. NEA is a charter member of the new Public Service Satellite Consortium joining 30 other educational institutions and organizations to make plans for launching a public service satellite to serve the educational, cultural, health, and welfare needs of our citizens.

.. NEA is a founding member of the Joint Council on Educational Telecommunications, Inc., which is serving as NASA's liaison for educational satellite activities.

NATIONAL EDUCATION ASSOCIATION

113th ANNUAL CONVENTION LOS ANGELES, CALIFORNIA

JULY 3-8, 1975

For Further Information:
Harold Wigren--(202) 833-4120

FOR IMMEDIATE RELEASE

Teachers in the Sky: The Outlook
for Educational Uses of Satellites

WASHINGTON, D.C.--It is a howling March night in the Alaska tundra, with the temperature reading 55 degrees below zero. The wind is gusting at nearly 50 miles an hour. It's 7 p.m. on a Wednesday evening, and in a small room off the principal's office two teachers are gathered at Allakaket, a tiny Alaskan community north of the Arctic Circle, to participate in the National Education Association's Satellite Seminar.

The biweekly direct-satellite broadcast of live programming on topics of professional concern for teachers, Satellite Seminar reaches into 34 Alaskan villages as well as Hawaii, providing two-way interaction between these points and the National Institutes of Health (NIH) at Bethesda, Md.

Teachers and staff members from NEA's headquarters in Washington, D.C., are also gathered--at midnight in Bethesda--to participate. Topics include a broad range of teacher concerns

such as open classrooms, strategies for teaching culturally different learners, use of paraprofessionals, innovative teaching practices, and ways of individualizing instruction.

The satellite voice communication series is aired over NASA's ATS-1 satellite located in mid-Pacific over American Samoa. The experiment is one approved by NASA in order to explore the feasibility of using communications satellites for teleconferencing between teachers in remote isolated areas.

Beginning in October 1975, the series will become Pan-Pacific and include teacher-leaders in the South Pacific as well as Micronesia--Fiji Islands, New Zealand, Rarotonga, Niue, Papua-New Guinea, American Samoa, and Saipan. All will be connected with Hawaii, Alaska, and Bethesda by linking three networks: the Alaskan, the Pacific PEACESAT, and the NIH Biomedical Communications networks.

Such is the shape of things to come in education's use of satellites. In the not-to-distant future, one might predict the linkage with ATS-3 over the Atlantic to bring contact with Overseas Dependent Schools in the Caribbean and in West Africa, thus enabling a teacher in Wellington, New Zealand, for example, to exchange ideas with a teacher in the Ivory Coast.

These teleconferences are designed to help teachers improve their own competencies. Via satellite they are able to keep in touch with far-distant peers having problems and opportunities that seemed at first thought to be totally unlike their own. In

reality, they find that they have much more to learn from one another than was first realized when the series began. The net result is a teacher-center-of-the-air concept. Practicing teachers determine the content of their own professional development. And teachers plan, implement, and evaluate what takes place.

But teleconferencing is only one area in which satellites can make a contribution to education. Two satellite projects currently being conducted give some clues as to the types of educational services that might be contemplated from satellites in the future. These are the PEACESAT project (Pan-Pacific Education and Communication Experiments by Satellite) and the HET (Health-Education Telecommunications experiments).

PEACESAT

PEACESAT has carried on a variety of experiments in the Pacific on NASA's ATS-1 which was launched in 1966: satellite transmission of library materials from one campus to another; satellite interconnection for library networking between universities in the Pacific; satellite communication related to research to combat starfish invasions and epidemics of diseases such as dengue fever; satellite medical consultations concerning infectious diseases; satellite agricultural experiments conducted in the Pacific region by the Hawaii Agricultural Experiments Service; news and public affairs program exchanges via satellite throughout the Pacific area; live instructional exchanges via

satellite between students in Alaskan and Hawaiian secondary school classes. These experiments have permitted interactive communications with voice and digital data.

HET Experiments

The ATS-F satellite (now ATS-6), successfully launched into geostationary orbit from Cape Kennedy on May 30, 1974, has been conducting unique educational and health experiments in Alaska, Appalachia, and the Rocky Mountains. Jointly sponsored by NASA; the Department of Health, Education, and Welfare; and the Corporation for Public Broadcasting, the Health-Education Telecommunications (HET) experiments have employed ATS-6 to distribute health and educational material to public broadcasting stations and cable television systems, using low-cost receiver terminals. The HET experiments in the nine Rocky Mountain States have focused largely upon career education and in-service teacher development.

A graduate teacher training project via satellite--to improve the quality of reading and career education--has been undertaken at 15 sites in Appalachia. Alaska's participation has been directed toward elementary school students.

A unique two-way tele-medicine series, WAMI, conducted by the Universities of Washington, Alaska, Montana, and Idaho, has enabled doctors in large urban centers of these states to diagnose the symptoms of patients, brought to the television cameras in remote villages hundreds of miles away, and to prescribe treatment.

(More)

Teachers in the Sky: The Outlook
For Educational Uses of Satellites

INDIA Experiment

After a year of experimental operation over the United States, NASA is in the process of moving ATS-6 to a point just east of Lake Victoria, East Africa, so as to view the Indian subcontinent for broadcasting four hours of television programming daily directly to 4,000 low-cost terminals and antenna systems across thousands of villages in rural India, villages whose population totals upwards of 20 million people.

The Indian experiment will encompass the transmission of essential information on family planning, health and hygiene, improved agricultural practices, national integration, in-school instruction, teacher education, and occupational skills. One account of the experiment reports: "...in many villages, the electrical power necessary for the television sets will come from bicycle generators pedaled in relays by enthusiastic village boys." And in some villages, the antennas are made of chicken wire!

CTS Experiment

ATS-6 will be moved to India during the summer of 1975 and therefore no longer will be available for U.S. demonstrations. The CTS satellite, a joint U.S.-Canada project, to be launched in December 1975, will provide the only means now definitely firm by which the present HET experimental programs can be continued. A number of U.S. organizations and institutions have submitted proposals for user experiments on CTS. The proposals cover such experiments as resource-sharing between regions, new arrange-

ments for the delivery of educational materials, delivery of computer-assisted instruction, and open learning non-traditional college courses.

What's Ahead for Education?

NASA has announced its intention to phase out its communications satellite research and development program, arguing that such research should be supported by the private sector and no longer needs NASA support. While it is true that a number of commercial domestic satellite systems are on the drawing boards, these are relatively low-power satellites that serve expensive earth terminals. They, therefore, would not serve the island or bush communications needs of remote areas of the Pacific and Alaska, for example, now served by ATS-1.

Further, they would be out of the reach of education financially and would offer few incentives for educational use. Most of the educational and health experiments have been oriented toward the development of high-powered satellites serving inexpensive earth terminals. The rule of thumb in space communications is, simply stated, "...the more (satellite power) you have in the air, the less (sophisticated and expensive earth terminals) you need on the ground." And vice versa!

What, then, is the solution for education?

Admittedly, the situation is not promising at this time. There is need for access by public service users, including educators, to satellites that are capable of being received by small,

inexpensive ground stations so that the types of satellite experimentation that has been pioneered so successfully in the experiments mentioned above might be continued and expanded on a regular operational basis. Only four alternatives seem to present themselves at the moment:

1. That educational and other public service users form a consortium to explore the possibility of funding and launching a noncommercial public service satellite to meet their needs. Such a group, known as the Public Service Satellite Consortium, already has been formed with an initial membership of 30 educational and health organizations. While this is a step toward a possible solution of the problem, the financial considerations are horrendous for nonprofit organizations without substantial outside funding sources.

2. That a public service capability be built into the domestic satellite system, with the Public Service Satellite Consortium leasing and administering the capacity for public service users.

3. That domestic satellite systems be required to make available free public service time for the benefit of the public, just as educational access channels are required on cable television systems and just as public service time is granted on commercial broadcast stations, in return for the privilege of operating the network for commercial purposes.

4. That public service users negotiate directly with each of the domestic satellite carriers for satellite space.

Teachers in the Sky: The Outlook
for Educational Uses of Satellites

Satellites have enormous potential for bringing about a global community and realizing NEA's Bicentennial theme, "A Declaration of Interdependence: Education for a Global Community." At this point, satellites are ready for education; with the types of experimenting mentioned above, educators are ready for satellites. But critical problems associated with financing remain to be worked out.

There seems to be no end to the kinds of options and possibilities satellite communications offer for the education of our people. Experimentation already has shown, among other things, that satellites can be more effective in:

--Facilitating live exchanges of ideas between teachers far removed geographically from one another.

--Linking resource people with children in classes long distances apart (for example, children in a U.S. classroom might be able to learn French via satellite from a teacher in Paris, and vice versa).

--Exchanging data between libraries and resource institutions.

--Making possible open universities and credit courses supported with graphic, written, and printed communications, videocassettes, and other reinforcement techniques.

--Providing instructional programs for all school levels (these may be recorded for replay later when needed).

--Retrieving information from audio and video banks of materials.

(More)

Teachers in the Sky: The Outlook For Educational Uses of Satellites

Limitations of satellite communication are not technical but instead are economic and political. In the long run, the benefits to be derived from satellite technology in building a global community far outweigh the costs involved.

June 1975

NEA BICENTENNIAL SATELLITE EXPERIMENT

"This is NIH-ATS, Bethesda calling . . . come in New Zealand."

Thus begins the National Education Association's Pan-Pacific Satellite Radio Conference the first Monday night of each month as a featured activity of NEA's participation in the Bicentennial Celebration. The satellite experiment illustrates dramatically NEA's Bicentennial theme, "A Declaration of Interdependence: Educating for a Global Community." The satellite makes possible a Pan-Pacific teachers' meeting bringing together electronically teachers in Alaska, Hawaii, Fiji, New Zealand, Rarotonga, Guadalcanal and the British Solomons with teachers and NEA staff in the Washington, D. C. area for a discussion of mutual problems facing education in today's schools. The seminar is an interactive, two-way demonstration and is made possible through the cooperation of NASA, the PEACESAT experiment in the Pacific, and the State of Alaska. Used in the experiment is NASA's Applications Technology Satellite, Number One (ATS-1) which was launched in 1966 and is located 22,300 miles above the earth at the Equator. At this altitude the satellite rotates at synchronous orbit with the earth so that for all intents and purposes the satellite appears stationary--a veritable telephone pole in the sky which can be used for many types of communications experiments simultaneously, such as radio, data transmission, and facsimile. The ground facilities are those of the PEACESAT experiment and the Alaska Broadcasting Commission. Studio facilities are furnished by the National Library of Medicine, and the broadcasts originate there. You will notice on the map behind you on the back wall of this exhibit the coverage area of NEA's satellite experiment, with the names of the locations with which the NEA has regular contact.

You are probably wondering how and why the NEA became involved in the use of satellite communications. The NEA satellite experimentation began in 1970

when NEA's affiliate in Alaska requested aid from NEA Central in planning its participation in the Alaskan Broadcasting Satellite Consortium, which was then being formed. With help from UNESCO, a study was made of the educational needs of Alaska to which satellite communications might make a unique contribution. Before too long, NASA offered the use of its ATS-1 satellite to Alaska-based organizations for experimental purposes. NEA-Alaska quickly responded and, with NEA's help, Satellite Seminar became a reality. Satellite Seminar--an idea supermarket for teachers where new ideas and teaching strategies were discussed--began in late 1972 with teachers in 8 Alaskan villages and NEA-Central in Washington participating. After an initial experimentation period, teachers requested that credit be offered for the Seminar and (as far as is known) the world's first college credit course offered via space satellite came into being, accredited by the University of Alaska. After a year and a half, Satellite Seminar added five more villages and then increased to 21, moving into a more flexible, free-wheeling format--a teacher center of the air concept--where teachers used other teachers as resources to cover a diverse number of topics in instruction and professional development. The number of participating villages has now grown to 34 with the addition of the villages participating also on experiments on NASA's newest satellite, ATS-6, launched last May. These additional stations also incorporate equipment to operate with ATS-1. Last fall the Alaska Series was expanded still further to include Hawaii, and this spring the series has gone international with the inclusion of New Zealand, the Fiji Islands, and several islands of the Pacific. The result is the monthly Pan-Pacific series described earlier. From half the world teachers once isolated will compare notes and exchange ideas on such topics as the multi-cultural classroom, community involvement in the schools, trends in in-service education, and many other topics of educational concern.

The NEA looks upon satellite communications as a vehicle to accomplish several Association objectives:

1. as a way to serve teachers who are in remote isolated villages of the U. S. and its territories.
2. as a means of improved communications between NEA-Central and the vast NEA membership in the field.
3. as a way of exploring how satellite communications might increase dialogue and increase communications between teachers in one part of our nation with those in other parts of our country from whom they are far removed.

At its 1976 convention, NEA hopes to launch, if funding can be obtained, a still further dimension of satellite communication for the teaching profession--a Canadian-American live classroom-to-classroom television exchange. A class in Ottawa would be communicating with a class in Miami through the joint Canadian-NASA satellite, CTS, which is due to be launched in late 1975. A TV signal generated in a classroom near Ottawa would be transmitted from the Canadian ground station there to the satellite which is over the Equator, then down to a U. S. station located in Rosman, North Carolina, from which it would go by land line to a classroom in Miami. Simultaneously, the picture generated in the Miami classroom would traverse this same link in the opposite direction to the Ottawa classroom. This project is under consideration but at this point the NEA has not completed negotiations with all the parties concerned. Whether the project can become a reality will be dependent on whether funding can be obtained.

We have all learned much in the past few years in our satellite experimentation. We have learned much not only in the prime area of teacher-to-teacher exchange but also in the secondary area of how to use satellite communication more efficiently. As the teacher on the sunbaked atoll in the South Pacific

finds something in common with the teacher in the 50° below zero Alaskan village, we all are finding something in common between NEA's Bicentennial theme, a declaration of interdependence, and the future of the satellite as a teaching tool both for teachers and for students in educating for a global community.

Space has been called the final frontier. There are some very useful outposts on that frontier that are helping to bring people closer together. The glamor, power, and excitement of a space launch far overshadows a tiny antenna on the Alaskan Tundra. The glory of newspaper headlines brings our attention to the space spectacular, but the every-day use of space and space-age technology hardly gets a mention. Endorsement of what might be called "routine" space-age technology might come from the humans in the frontier villages of Alaska and the remote islands of the Pacific. In small Alaskan towns with no doctor, specially trained health aides can communicate with a hospital via satellite radio. Likewise, teachers in remote villages can keep abreast of new developments in teaching and learning and even continue their own professional growth through the wonder of space-age technology.

Arthur Clarke, the British science writer, as far back as 1946, in forecasting the age of communication satellites, foresaw that the future development of mankind, on the spiritual no less than the material plane, was bound up with the conquest of space. Clarke drew attention to the fact that most of the human race exists in a cultural vacuum; it is still divided into myriads of insulated villages or tribes, as it has been since the dawn of history. But now, Clarke reasoned, "in a brief moment of time, all this will end. The communications satellites will make it impossible for any human group to be more than a few milliseconds from any other group. The social consequences of this, for good or evil, may be as great as those brought about by the printing press or the internal combustion engine, and they will come upon us much more swiftly."

R O S T E R

PLANNING SESSION FOR SATELLITE SERIES 1973-74

August 23, 1973

Anchorage

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Barbara Bremner
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DECISIONS MADE AT PLANNING SESSION
PLANNING SESSION FOR SATELLITE SERIES 1973-74
AUGUST 23, 1973
at
UNIVERSITY OF ALASKA, ANCHORAGE

1. Two series will definitely be aired this fall:

   a. SATELLITE SEMINAR -- A 3-hour credit course designed primarily for teachers in smaller villages who do not have access to Community Colleges or other professional development opportunities.

   b. NEA-ALASKA HOUR -- An hour-long discussion/news series once per month dealing with crucial issues facing the Association and the schools. This will be primarily for Association leaders in larger cities but open to all teachers on the network. Suggested title: NEATS (News Every Alaskan Teacher Seeks).

2. 25 communities will be in the experiments, including 17 small villages, 4 large villages, 2 medium-sized cities, and 2 large cities.

Large Villages or Cities (8)	Small Villages (17)
Barrow (HS)	Allakaket (S)
Kotzebue (H)	Anaktuvuk Pass (S)
Nome (H)	Arctic Village (S)
Bethel (H)	Beaver (S)
Kodiak (HL)	Chalkyitsik (S)
Juneau (HL)	Eagle (S)
Anchorage (HL)	Fort Yukon (C)
Fairbanks (S)	Galena (none yet)
	Hughes (S)
	Huslia (S)
Transceiver (Satellite Radio) Located	Koyukuk (S)
	Nulato (S)
	Ruby (S)
H - Hospital	Saint Paul Island (H)
S - School	Stevens Village (S)
L - Library of Hospital	Tanana (S)
C - Community Center	Venetie (S)

3. SATELLITE SEMINAR:

   a. Minimum number needed to offer course -- 10.

   b. Same time as this past spring: 7 to 8 p.m. on Mondays,

one hour only at outset but increasing to an hour and a half later if need is felt to do so.

c. Planning Session via satellite scheduled for September 24, same time as above.

d. Dates: the Seminar will begin on Monday, October 15 and continue 15 weeks later (February 4 or 11).

Is October 22 a holiday in the villages? Should we skip this night?

e. Bob Cooksey is to be staff coordinator of this project.

f. A letter will be sent to each teacher in the smaller villages and to officers/leaders in the four largest communities (Anchorage, Fairbanks, Juneau, Kodiak) inviting them to participate, either for credit or audit, and asking them to indicate their 1st, 2nd, and 3rd choices for topics for the course. Ballots should be returned to Bob Cooksey in Juneau no later than September 17 for tabulation. Results will be reported at September 24 planning session.

g. Depending upon the vote, consideration will be given to offering one topic for 15 weeks for 3 hours' credit or 3 topics for 5 weeks each for one hour's credit for each 5 weeks.

h. The following topics were selected by participants for submission to the prospective enrollees --

.. Individualized Instruction, Open Classrooms, Non-Gradedness
.. Teaching Strategies for the Culturally Different
.. Techniques for Improving Use of the Satellite in the Classroom
.. Language Development
.. Cross-Cultural Education
.. Family Life Problems in the Villages
.. Teaching of the Social Studies to Native Learners (Land Claims, Pipeline, Wildlife Problems, etc.)

i. Utilization --

Village coordinators: It was agreed that teacher coordinators would be appointed for each participating village by Alaska-NEA. This person will be responsible for insuring that the technology is operative in the village and for notifying Glenn Stanley at the University of Alaska if it is not. The coordinator will also be responsible for teachers knowing about the series, receiving enrollment forms, and distributing supplementary materials sent in

advance of the program so that participants can become familiar with the topic before they arrive for the broadcast.

Supplementary materials: Also, in order to improve the broadcasts and to bring about increased interaction on the air, supplementary materials -- print and non-print -- will be sent out to the villages in advance of each program so that participants can become familiar with the topic for discussion and with the resource person who is to be on the program.

4. NEATS (News Every Alaskan Teacher Seeks):

a. Once per month according to the following schedule --

Thursday,	September 20	Thursday,	January 17
	October 18		February 21
	November 15		March 21
	December 20		

If the Satellite is not available on Thursday nights, the group recommended that the sessions be held the following night, Friday.

b. Objectives --

.. To use the satellite to make teachers more effective in rural Alaska
.. To use the satellite to bring about a more rapid resolution of the problems teachers face in rural Alaska

c. The following topics were suggested --

.. Teacher Evaluation
.. Federal Legislation, Including Copyright
.. Conversation with Helen Wise and Terry Herndon
   (1) Merger
   (2) Main Points in the New NEA Constitution: How It Affects Alaska
   (3) Political Action
.. Alaska-NEA Delegate Assembly Concerns: Curriculum Commission Report, Cross-Cultural
.. Alaska-NEA Delegate Assembly: Alaska Educational Funding
.. (1) Accountability
   (2) Vouchers
   (3) Merit Pay
.. NEA-Alaska Concerns: Decentralization of State-Operated Schools

NEATS
NEA-Alaska Hour

Tentative
Program Schedule

NEATS (News Every Alaskan Teacher Seeks)

Sept. 20	Teacher Evaluation	Bernard H. McKenna
Oct. 18	Federal Legislation, Including Copyright	Stanley J. McFarland and Harold E. Wigren
Nov. 15	Conversation with Helen Wise and Terry Herndon	Helen D. Wise and Terry Herndon
	(1) Merger (2) Main Points in the New NEA Constitution: How It Affects Alaska (3) Political Action	
Dec. 20	Alaska-NEA Delegate Assembly Concerns: Curriculum Commission Report, Cross-Cultural	
Jan. 17	Alaska-NEA Delegate Assembly: Alaska Educational Funding	
Feb. 21	Accountability; Vouchers; Merit Pay	Commissioner Marshall Lind (State Ed. Commissioner) and Dave D. Darland
Mar. 21	NEA-Alaska Concerns: Decentralization of State-Operated Schools	

NOTE: In the event the satellite is not available on Thursday evenings, these programs will be scheduled for Friday evenings (one night later).

LARGE VILLAGES (8)	TRANSCEIVER (SATELLITE RADIO) LOCATED
Barrow (HS)	H - Hospital
Kotzebue (H)	S - School
Nome (H)	L - Library of Hospital
Bethel (H)	C - Community Center
Kodiak (HL)	
Juneau (HL)	
Anchorage (HL)	
Fairbanks (S)	

SMALL VILLAGES (17)

Allakaket (S)	Huslia (S)
Anaktuvuk Pass (S)	Koyukuk (S)
Arctic Village (S)	Nulato (S)
Beaver (S)	Ruby (S)
Chalkyitsik (S)	Saint Paul Island (H)
Eagle (S)	Stevens Village (S)
Fort Yukon (C)	Tanana (S)
Galena (none yet)	Venetie (S)
Hughes (S)	

PARTICIPATING SCHOOLS

School size	No. schools	No. teachers
1 - 16 teacher schools	17	56
17 - 49 teacher schools	4 (Kotzebue, Barrow, Bethel, Nome)	200
50 - 100 teacher schools	2 (Kodiak, Juneau)	385
100+ teacher schools	2 (Anchorage, Fairbanks)	1,800

Above are the numbers of teachers who have access to satellite terminals.

COURSE EVALUATION

Satellite Seminar -- Open Classroom Concepts

Satellite -- Monday Evenings

Directions: Please respond candidly and in as much detail as you see necessary to the following questions. Your opinions will be very helpful in planning future educational satellite programming.

These questions may also be helpful in guiding the evaluation discussion on the February 25th seminar meeting. Please return this questionnaire after that meeting.

I. Seminar Presentation and Organization

A. Were there any seminar presentations that you found particularly helpful - or liked better than the rest? Please specify and indicate why you think these were better.

B. Were you comfortable with the organization of the seminar (guest speaker format, time allocations, materials sent, etc.)? How could it have been improved?

II. Seminar Content

A. Did the materials presented meet your expectations for the course? If not, what would you have preferred -- particularly, should the emphasis have been changed?

(continued)

B. Indicate three concepts, ideas or particular materials you may try in the future as a result of this seminar.

1.

2.

3.

III. Seminar Assignments

A. Were the assignments an appropriate and useful part of the seminar? If not, present a more viable solution for assignments.

1. Application paper

2. Project

3. Open-book test (you may react if you took it or not)

The satellite seminar for credit was an experiment this semester. Assuming similar programming would be offered in the future, would you be interested in participating again, or would you recommend it to a friend?

LIST OF PARTICIPANTS AT NEA SPONSORED
NEASAT PLANNING SESSION:

Anchorage Westward Hotel Rm. 275
Saturday September 21, 1974
9:00-4:00

Betty Jenkins	- Hawaii Classroom Teacher
Margaret Tetzlaff	- Ft. Yukon
Ms. Pat Cooper	- Tanana
Roger McPherson	- Nulato
Don Gray	- Fairbanks
Betty LaCamppiello	- Ft. Wainwright
Carolyn Doggett	- Anchorage
Harriet Booth	- Elmendorf
Pam McCarl	- Ft. Richardson
Mary Borthwick	- Juneau
Gene Franks	- Valdez
Carol Borg	- NEA-Alaska Executive Committee
Terry Stimson	- NEA-Alaska President
Frances Quinto	- NEA Office of Instruction and Professional Development
Harold Wigren	- NEA Staff responsible for getting us together
Jim Milne	- State Operated School Coordinator for ATS-1 Programs
Walt Parker	- Private Evaluator for ATS-1 Programs
Sue Pittman	- Free Lancer - came to meeting out of personal interest. Formerly with KUAC at U of A in Fairbanks. Early involvement in ATS-1 programs
Chuck O'Connell	- Deputy Executive Secretary - NEA-Alaska
Bob Cooksey	- NEA-Alaska Staff - Program Chairman

A G E N D A

Planning Session for NEASAT Series 1974-75

Anchorage
September 21, 1974

1. Introduction of Participants

2. Description and evaluation of last year's program

3. Purposes of the 1974-1975 series

   a. to get information
   b. to resolve problems
   c. to get Association action on an issue
   d. to set up a hot line to teachers on specific problems
   e. to make NEA and its services more visible and accessible to teachers
   f. other

4. Objectives

   a. to obtain maximum involvement of Alaska and Hawaii teachers
   b. to encourage participation by teachers who are native to Alaska
   c. to stimulate a Pan-Pacific dialogue between Hawaii and Alaska teachers with NEA Central on problems of mutual concern

   d. to extend the effects of the program to non-participating villagers
   e. to determine the feasibility of teleconferencing via satellite for future domestic satellite systems

5. Pan-Pacific Teacher Center of the Air Concept

   a. Discussion of involvement of para-professionals
   b. Discussion of involvement of community members

6. Constraints

   a. time frame: time zones, assigned satellite time
   b. fairness doctrine -- use of public airways for advocacy and political action
   c. local barriers to use of facilities

7. Possible discussion topics for programs -- see attached list

8. Frequency of programs

   a. one per month; two per month
   b. discreet topic each night, or multiple topics
   c. two or more programs on a given topic
   d. how to sustain interest between programs

9. Length of programs

   a. one hour or longer?
   b. a special half-hour for Alaska and one for Hawaii
   c. time the series is to be aired

10. Format of program

   a. who presides?
   b. possible patterns of participation
      (1) same as last year (roll call, assigned topics with resource person, open discussion)
      (2) villagers taking turns at presenting topics, followed by open discussion
      (3) no presentation -- just open approach with questions and responses (hot line for teachers)
      (4) receipt of informational materials to serve as basis for discussion
      (5) update by NEA staff and other resource persons in Washington, D.C., and elsewhere
      (6) other

11. Publicity

   a. to participating villages
   b. to non-participating villages
      (1) possible circulation and tapes of programs to those interested
   c. to state and national journals and other periodicals and releases

12. Evaluation
   a. External
      (1) to NASA
      (2) to NEA
      (3) by Walt Parker for USOE

   b. Internal
      (1) taping and transcribing final evaluation session
      (2) questionnaires to participating teachers
      (3) review of Participating Sheet used this year on Satellite Session

SATELLITE ASSOCIATION HOUR QUESTIONNAIRE

Indicate your interest in having the satellite program provide information about:

	Very Interested	Somewhat Interested	Not Interested
1. The ways students learn (e.g., learning styles, motivation, reinforcement, retention)	_____	_____	_____
2. A subject area:			
• reading	_____	_____	_____
• language	_____	_____	_____
• mathematics	_____	_____	_____
• science	_____	_____	_____
• social studies	_____	_____	_____
• the arts	_____	_____	_____
• other _____	_____	_____	_____
3. Teaching skills:			
• classroom management	_____	_____	_____
• individualized instruction	_____	_____	_____
• inquiry technique	_____	_____	_____
• value clarification	_____	_____	_____
• students teaching students	_____	_____	_____
• other _____	_____	_____	_____
4. Alternative organizational patterns:			
• team teaching	_____	_____	_____
• open classroom	_____	_____	_____
• nongrading	_____	_____	_____
• year-round schools	_____	_____	_____
• other _____	_____	_____	_____
5. Instructional materials:			
• teacher-prepared	_____	_____	_____
• new curriculum projects	_____	_____	_____
• programmed instruction	_____	_____	_____
• technology -- use of TV, radio, satellite, etc.	_____	_____	_____
• other _____	_____	_____	_____
6. Other (please specify)			
• _____	_____	_____	_____
• _____	_____	_____	_____
• _____	_____	_____	_____

1974-1975

NEA-Satellite Alaska-Hawaii Association Hour (NEASAT)

Wednesday Dates	Topic(s)
Oct. 16	Professional Information for Teachers (Membership Promotion); Multi-Grade Techniques
Nov. 6	Cultural Pluralism I
Nov. 20	Alleged Teacher Surplus (RIF-Negotiations)
Dec. 4	Cultural Pluralism II
Dec. 18	Delegate Assembly Concerns
Jan. 15	Land Claims; Delegate Assembly Follow-Up
Feb. 5	(Cultural Pluralism III)
Feb. 19	Governance of the Profession
March 5	Student Participation in Program Development
Mar. 19	Teacher Evaluation
Apr. 2	Federal and State Legislation Affecting Teachers
April 16	Utilization of Para-Professionals
May 7	Innovative Practices: What Works for Me
May 21	Association Goals and Objectives; Evaluation

MAY 21 NEASAT SESSION

Evaluation of NEASAT 1974-75

I. Purpose of evaluation is to find out if experiment warrants continuation next year.

A. Which of the above topics:

1. received the best response or feedback,
2. involved the most participants,
3. served the needs of the members.

B. Are programs most effective when:

1. There are resource people available for answering pertinent questions.

2. There is open discussion without a specific resource person.

3. There is a short presentation made by a resource person and then open discussion.

4. There is a statement of the problem and then allowing the discussion to develop.

C. Discussion: Does experiment warrant continuation next year?

1. If "yes," how should this be planned?

2. What corrections or changes are necessary? PR? Topics?

3. What will NEA's role be next year?

4. How to involve more participants?

5. Is Pan-Pacific experiment a better way to involve participants?

6. Should NEASAT be held once a month and deal with Association matters, (i.e. legislation, contract provisions etc.) and then have Pan-Pacific, once a month deal with instructional issues?

7. Possible topics for next year:

- o Parent relationship to school
- o drug abuse
- o mental health problems
- o student rights
- o student problems
- o emergent curriculum trends
- o Human relations
- o others

SAMPLE LIST OF DISCUSSION QUESTIONS SENT TO ALL STATIONS

February 19 NEA-SAT Session:

'Governance of the Profession'

1. What does "governance" mean?
2. How can the public be sure it will not lose control of the schools?
3. What is the relationship between governance and accountability?
4. Should the association be considered the "profession"?
5. How can points of view from all segments of the profession be assured?
6. Is a Standards and Licensure Board incompatible with a "teacher advocate" association?
7. Should students preparing to teach be represented on a practices and standards board?
8. Should the public be represented on a practices and standards board?
9. What answers can you give to the school board member, legislator, or parents who ask what will it do for my child?

NEA chaired this session with Margaret Knispel as the chief resource person and Fran Quinto as coordinator.

LEADERS: PAN-PACIFIC EXPERIMENT

Hawaii	-- Grace Noda, National IPD Council Member from Hawaii Betty Jenkins, Chairman, IPD Commission, Hawaii State Teachers Assn. Carol Hastings, Teacher Representative, HSTA Fran Quinto, IPD Staff Member
Fiji	-- Gilda Benstead, Satellite Project Manager (Mrs.) Esiteri Kamikamica, General Secretary, Fiji Teachers Assn.
New Zealand	-- Tony Hanley, Associate Director, PEACESAT Project, New Zealand Ted Simmonds, National Secretary, New Zealand Education Institute Bruce Webster, Executive Secretary, New Zealand Post Primary Teachers Assn.
Anchorage	-- Terry Stimson, President, NEA-Alaska
Fairbanks	-- Don Gray, President, Fairbanks NEA Doris Ray, Teacher and IPD Council Member
Nulato	-- Karen McPherson and Roger McPherson, Teachers
Aniak	-- Jim Alter, Teacher
Juneau	-- Bob Cooksey, NEA-Alaska Staff
Rarotonga (Cook Islands)	-- Stuart Kingan, Scientific Research Division, Premier's Dept.
Honiara (British Solomons)	-- John Chick, University South Pacific, Soloman Islands Centre
Niue (British Solomons)	-- Rod Spooner, Education Dept., Niue
Tarawa (Gilbert Islands)	-- Taui Finikase, USP Regional Centre

Pan-Pacific Pilot Program #1: February 10, 1975

C O M M U N I T Y I N V O L V E M E N T

I N T H E W O R K O F T H E S C H O O L S

Questions for Discussion

1. What is meant by community involvement? Should schools be decentralized so that the community can have a greater voice in the operation of its schools?

2. Who makes decisions about what kinds of things at what point? (Who makes decisions regarding the selection of teachers, or the selection of textbooks and instructional materials?)

3. How do you involve parents in the operation of your schools? (What are the vehicles and process by which you get parents involved?)

4. What is the role of community groups? What is the role of the schools? What is the role of the professional association of teachers?

5. Do you have parent advisory groups for each school? If so, how do they function?

6. What guidelines have you set up that may help to alleviate some of the problems caused by involvement of the community in the school program?

7. What comments have you regarding volunteerism versus paid staff? Are parents used as replacements for school staff?

8. Do the community's goals for education differ from those of the school staff?

9. In many villages, teachers are paid more and have a higher standard of living than most villagers. Does this create a problem? If so, how do you bridge the gap between the school and the community?

Suggested Procedure on the Air

1. Roll call of all stations

2. Opening statements by the NEA President and by the NEA Director of International Relations

(continued)

Suggested Procedure on the Air

3. Round robin of stations in which each states the philosophy and goals of its country regarding community involvement at the local level (Begin with Fiji, then New Zealand, Hawaii, Anchorage, and Washington, D.C.)

4. Reactions to above responses (Those stations wishing to speak should first identify themselves and request opportunity to speak.)

5. Group interaction based on above questions which seem to be of most interest to participants.

Pan-Pacific Pilot Program #2: March 10, 1975
(March 11, 1975 in Pacific)

C O M M U N I T Y E D U C A T I O N

Questions for Discussion:
0500-0630 Zulu (GMT) March 11, 1975

1. What decision-making role should students and parents play in an ideal community-school situation?

2. What roles should community agencies, such as 4-H Clubs, Boy and Girl Scouts, YMCA, YWCA, health and welfare agencies, play in the work of the school?

3. How does, or could, community input change the schools? Does it make a difference?

4. Where background of teachers are different from the backgrounds of the community, what strategies can be used to bring the two groups together?

5. What comments have you regarding volunteerism versus paid staff? Are parents used as replacements for school staff?

6. In many villages, teachers are paid more and have a higher standard of living than most villagers. Does this create a problem? If so, how do you bridge the gap between the school and the community?

Pan-Pacific Pilot Program #3: April 7, 1975

T E A C H I N G I N A C U L T U R A L L Y

D I V E R S E C L A S S R O O M

Questions for Discussion

1. What teaching strategies harmonize rather than conflict with learning styles of children from a different cultural background?

2. What teaching methods have you found successful in working with children from multi-cultural backgrounds?

3. How can teachers better prepare themselves to deal with the various learning styles of children? Where do we start training our teachers? And where do we as teachers go for help in this area?

4. Is the curriculum reflective of the various cultural backgrounds of the children you teach?

5. To what extent do your students compete in schools?

6. How do you enhance the self-image of native students in your teacher-pupil relationships?

7. Have you noticed any special abilities which students tend to possess or subject areas where they learn specially quickly?

8. Where do you start when you don't have materials to deal with the culture you have proximity with?

9. Do your students have materials in their native language?

UNIVERSITY OF HAWAII

Curriculum & Instruction · College of Education

March 24, 1975

Mr. Harold Wigren
National Education Association
1201 16th St. Northwest
Washington, D.C. 20036

Dear Mr. Wigren,

My apologies for this delay in communicating to you the arrangements made here by Mrs. Betty Jenkins in regard to the April 7 broadcast on Pluralism. As agreed upon, I have taken the liberty of contacting some colleagues and outlining the content to be covered for this session. The following is a skeletal outline:

Topic: Curricular Implications of Cultural Pluralism

Schools are and always have been concerned with the what to teach, the why of our choices and the how to teach. The philosophical and psychological dimensions have guided our decisions, have made us alter and modify some of these decisions and have made us question and re-examine these same decisions. As we move into a greater awareness of our culturally pluralistic society, we have readjusted our "looking glass" and raised questions relative to the cultural variables and the roles they play in our classrooms.

The panel speakers hope to address themselves to these concerns. We hope to generate questions and share our observations of the dynamics involved when pragmatic and programmatic translations are attempted by school personnel to include ethnicity as a major consideration in planning and implementing school programs.

We will focus on the teacher of a culturally diverse classroom and discuss the type of professional preparation such a teacher might need e.g. a rich background in social anthropology, an understanding of value systems as they influence behavior, the identification of teaching strategies appropriate for these classrooms, etc.

Dr. Anthony Marsella and Dr. Nancy Foon Young will join me on Monday, April 7. Dr. Marsella is an assistant Professor in the Department of Psychology at the University of Hawaii and Dr. Young is Director of General assist Center which unit produces cross-cultural materials for use in the classroom. We look forward to an informal and informative exchanges of perspectives on Cultural Pluralism.

Cordially,

Virgie Chattergy
Virgie Chattergy

VC:ag
cc: Betty Jenkins
Gilda Benstead

West Hall Annex 3 · Room 226 · 1776 University Avenue · Honolulu, Hawaii 96822 / Cable Address: UNIHAW

RESPONSIBILITIES OF VILLAGE COORDINATORS TO BE

APPOINTED BY NEA-ALASKA

(Coordinators are to assume duties for
both Seminar and Association sessions.)

1. Insure that equipment is operative for sessions. In case of difficulty, contact Glenn Stanley at University of Alaska, Geophysical Institute, College, Alaska, 99701.

2. Be sure equipment is available and not locked up for all sessions.

3. Be knowledgeable about issues and problems related to technical matters and substance of sessions.

4. Be 'on board' for all sessions.

5. Encourage enrollment in course and participation in the village for each session.

6. Process enrollment and survey forms, i.e., distribute, collect and mail to appropriate person.

7. Receive and distribute supplementary and/or advance materials to all participants.

8. Initiate, encourage and assist participants to structure a viewpoint or frame questions for the seminar discussion.

9. Check with participants their reasons for absence or non-participation (for persons enrolled in course or who have made commitment to participate).